**Problem**

Show that the sum, 1plus or minus2plus or minus3plus or minus...plus or minus99=100, where plus or minusbetween each term can be independently set to + or minus, has at least one solution.

**Solution**

Consider the sum, *n* minus(*n*+1) minus(*n*+2) + (*n*+3) = 0.

In other words, we can set four consecutive integers to zero:

1 minus2 minus3 + 4 = 0  
5 minus6 minus7 + 8 = 0  
9 minus10 minus11 + 12 = 0  
...  
93 minus94 minus95 + 96 = 0

Then -97 + 98 + 99 = 100

What about 12plus or minus22plus or minus32plus or minus...plus or minus992 = 100?  
Is there a solution for cubes?